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RAW SEQUENCE LISTING

DATE: 05/15/2003

PATENT APPLICATION: US/09/935,366A

TIME: 08:46:29

Input Set : A:\US09935366A.raw

Output Set: N:\CRF4\05152003\I935366A.raw

SEQUENCE LISTING

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1 (1) GENERAL INFORMATION:
            (i) APPLICANT: Bazan, J. Fernando
      3
            (ii) TITLE OF INVENTION: MAMMALIAN CYTOKINE; RELATED REAGENTS
           (iii) NUMBER OF SEQUENCES: 16
            (iv) CORRESPONDENCE ADDRESS:
      6
                  (A) ADDRESSEE: DNAX Research Institute
      7
                  (B) STREET: 901 California Avenue
                  (C) CITY: Palo Alto
      9
                  (D) STATE: California
     10
                  (E) COUNTRY: USA
                                                                 ENTERED
     11
                  (F) ZIP: 94304-1104
     12
            (v) COMPUTER READABLE FORM:
     13
                  (A) MEDIUM TYPE: Floppy disk
                  (B) COMPUTER: IBM PC compatible
                  (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     15
     16
                  (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
     17
            (vi) CURRENT APPLICATION DATA:
C--> 18
                  (A) APPLICATION NUMBER: US/09/935,366A
C--> 19
                  (B) FILING DATE: 22-Aug-2001
     20
                  (C) CLASSIFICATION:
     21
           (vii) PRIOR APPLICATION DATA:
     22
                  (A) APPLICATION NUMBER: 09/122,443
     23
                  (B) FILING DATE:
     24
          (viii) ATTORNEY/AGENT INFORMATION:
     25
                  (A) NAME: Ching, Edwin P.
     26
                  (B) REGISTRATION NUMBER: 34,090
     27
                  (C) REFERENCE/DOCKET NUMBER: DX0758K1
     28
            (ix) TELECOMMUNICATION INFORMATION:
     29
                  (A) TELEPHONE: (650)852-9196
                  (B) TELEFAX: (650)496-1200
     31 (2) INFORMATION FOR SEQ ID NO: 1:
             (i) SEQUENCE CHARACTERISTICS:
     33
                  (A) LENGTH: 570 base pairs
     34
                  (B) TYPE: nucleic acid
                  (C) STRANDEDNESS: single
     35
                  (D) TOPOLOGY: linear
     36
     37
            (ii) MOLECULE TYPE: cDNA
            (ix) FEATURE:
     38
     39
                  (A) NAME/KEY: CDS
     40
                  (B) LOCATION: 1..567
     41
            (ix) FEATURE:
                  (A) NAME/KEY: mat_peptide
     42
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RAW SEQUENCE LISTING DATE: 05/15/2003 PATENT APPLICATION: US/09/935,366A TIME: 08:46:29

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Output Set: N:\CRF4\05152003\I935366A.raw

43 (B) LOCATION: 64567																			
44		(xi)	SEQ	UENC	E DE	SCRI	PTIO	N: SI	EQ II	ОИ С	: 1:								
45						AGA													48
46				Gly	Ser	Arg	Ala	Val	Met	Leu	Leu	Leu	Leu	Leu	Pro	Trp	Thr		
47		-21	-20					-15					-10						
48		GCT	CAG	GGC	AGA	GCT	GTG	CCT	GGG	GGC	AGC	AGC	CCT	GCC	TGG	ACT	CAG		96
49		Ala	Gln	Gly	Arg	Ala	Val	Pro	Gly	Gly	Ser	Ser	Pro	Ala	Trp	Thr	Gln		
50		- 5					1				5					10			
51		TGC	CAG	CAG	CTT	TCA	CAG	AAG	CTC	TGC	ACA	CTG	GCC	TGG	AGT	GCA	CAT	1	44
52		Cys	Gln	Gln	Leu	Ser	Gln	Lys	Leu	Cys	Thr	Leu	Ala	Trp	Ser	Ala	His		
53					15					20					25				
54		CCA	CTA	GTG	GGA	CAC	ATG	GAT	CTA	AGA	GAA	GAG	GGA	GAT	GAA	GAG	ACT	1	92
55		Pro	Leu	Val	Gly	His	Met	Asp	Leu	Arg	Glu	Glu	Gly	Asp	Glu	Glu	Thr		
56				30	_			_	35	_			_	40					
57		ACA	AAT	GAT	GTT	CCC	CAT	ATC	CAG	TGT	GGA	GAT	GGC	TGT	GAC	CCC	CAA	2	40
58						Pro													
59			45	-				50		_	-	-	55	-	-				
60		GGA	CTC	AGG	GAC	AAC	AGT	CAG	TTC	TGC	TTG	CAA	AGG	ATC	CAC	CAG	GGT	2	88
61						Asn													
62		60		,	•.		65			2		70	,				75		
63		CTG	ATT	TTT	TAT	GAG	AAG	CTG	CTA	GGA	TCG	GAT	ATT	TTC	ACA	GGG	•	3	36
64						Glu													
65					2	80	4			2	85	1				90			
66		CCT	TCT	CTG	CTC	CCT	GAT	AGC	CCT	GTG		CAG	CTT	CAT	GCC		CTA	3	84
67						Pro													
68					95		- 1			100		-			105				
69		CTG	GGC	CTC	AGC	CAA	CTC	CTG	CAG		GAG	GGT	CAC	CAC		GAG	ACT	4	32
70						Gln												_	
71			-	110					115	-		1		120	1				
72		CAG	CAG	ATT	CCA	AGC	CTC	AGT	CCC	AGC	CAG	CCA	TGG	CAG	CGT	CTC	CTT	4	80
73						Ser												_	
74			125					130					135		5				
75		CTC	CGC	TTC	AAA	ATC	CTT	CGC	AGC	CTC	CAG	GCC	TTT	GTG	GCT	GTA	GCC	5	28
76						Ile													
77		140			_		145					150					155		
78		GCC	CGG	GTC	TTT	GCC		GGA	GCA	GCA	ACC		AGT	CCC	TAA			5	70
79						Ala												_	. •
80			9			160		0			165		001						
82	(2)	INFOR	RMATI	I NO	OR S		D NO): 2:	•										
83	ι – /					ARACI													
84		(-)				: 189				:									
85			(B)							,									
86																			
87	(ii) MOLECULE TYPE: protein																		
88	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:																		
89						Arg						Leu	Leu	T.eu	Pro	Trn	Thr		
90			-20	оту	OGI	ALY	лта	-15	1166	шeu	ъeu	пeи	-10	TEU	110	ттЬ	TIIL		
91				G1 v	Δra	Ala	V=1		G1++	Glv	Ser	Ser		Δ 1 =	Trn	Th∽	Gln		
92		-5	GTII	ату	ALY	ита		FIO	дту	сту	_	Ser	LIO	wrd	ттЪ		GTII		
26		-5					1			,	5					10			

RAW SEQUENCE LISTING DATE: 05/15/2003 PATENT APPLICATION: US/09/935,366A TIME: 08:46:29

Input Set : A:\US09935366A.raw

Output Set: N:\CRF4\05152003\1935366A.raw

93	Cys Gln Gln Leu Ser Gln Lys Leu Cys Thr Leu Ala Trp Ser Ala His	
94	15 20 25	
95	Pro Leu Val Gly His Met Asp Leu Arg Glu Glu Gly Asp Glu Glu Thr	
96	30 35 40	
.97	Thr Asn Asp Val Pro His Ile Gln Cys Gly Asp Gly Cys Asp Pro Gln	
98	45 50 55	
99 100	Gly Leu Arg Asp Asn Ser Gln Phe Cys Leu Gln Arg Ile His Gln Gly 60 65 70 75	
101	Leu Ile Phe Tyr Glu Lys Leu Leu Gly Ser Asp Ile Phe Thr Gly Glu	
102	80 85 90	
103	Pro Ser Leu Leu Pro Asp Ser Pro Val Ala Gln Leu His Ala Ser Leu	
104	95 100 105	
105	Leu Gly Leu Ser Gln Leu Leu Gln Pro Glu Gly His His Trp Glu Thr	
106	110 115 120	
107	Gln Gln Ile Pro Ser Leu Ser Pro Ser Gln Pro Trp Gln Arg Leu Leu	
108	125 130 135	
109	Leu Arg Phe Lys Ile Leu Arg Ser Leu Gln Ala Phe Val Ala Val Ala	
110	140 145 150 155	
111	Ala Arg Val Phe Ala His Gly Ala Ala Thr Leu Ser Pro	
112	160 165	
114 (2)	~	
115	(i) SEQUENCE CHARACTERISTICS:	
116 117	(A) LENGTH: 1203 base pairs	
117	(B) TYPE: nucleic acid (C) STRANDEDNESS: single	
119	(D) TOPOLOGY: linear	
120	(ii) MOLECULE TYPE: cDNA	
121	(ix) FEATURE:	
122	(A) NAME/KEY: CDS	
123	(B) LOCATION: 113700	
124	(ix) FEATURE:	
125	(A) NAME/KEY: mat_peptide	
126	(B) LOCATION: 176700	
127	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:	
128	CGCTTAGAAG TCGGACTACA GAGTTAGACT CAGAACCAÁA GGAGGTGGAT AGGGGGTCCA	60.
129	CAGGCCTGGT GCAGATCACA GAGCCAGCCA GATCTGAGAA GCAGGGAACA AG ATG	115
130	Met	
131 132	-21	162
132	CTG GAT TGC AGA GCA GTA ATA ATG CTA TGG CTG TTG CCC TGG GTC ACT Leu Asp Cys Arg Ala Val Ile Met Leu Trp Leu Leu Pro Trp Val Thr	163
134	-20 -15 -10 -5	
135	CAG GGC CTG GCT GTG CCT AGG AGT AGC AGT CCT GAC TGG GCT CAG TGC	211
136	Gln Gly Leu Ala Val Pro Arg Ser Ser Pro Asp Trp Ala Gln Cys	
137	1 5 10	
138	CAG CAG CTC TCT CGG AAT CTC TGC ATG CTA GCC TGG AAC GCA CAT GCA	259
139	Gln Gln Leu Ser Arg Asn Leu Cys Met Leu Ala Trp Asn Ala His Ala	
140	15 20 25	
141	CCA GCG GGA CAT ATG AAT CTA CTA AGA GAA GAA GAG GAT GAA GAG ACT	307
142	Pro Ala Gly His Met Asn Leu Leu Arg Glu Glu Glu Asp Glu Glu Thr	

RAW SEQUENCE LISTING DATE: 05/15/2003 PATENT APPLICATION: US/09/935,366A TIME: 08:46:29

Input Set : A:\US09935366A.raw

Output Set: N:\CRF4\05152003\1935366A.raw

143	30	35	40					
144			GAA GAT GGT TGT GAC CCA CAA	355				
145	Lys Asn Asn Val Pro Ar	g Ile Gln Cys	Glu Asp Gly Cys Asp Pro Gln					
146		0	55 60					
147			TTG CAA AGG ATC CGC CAA GGT	403				
148	Gly Leu Lys Asp Asn Se	er Gln Phe Cys	E Leu Gln Arg Ile Arg Gln Gly					
149	65		70 75					
150	CTG GCT TTT TAT AAG CA	C CTG CTT GAC	C TCT GAC ATC TTC AAA GGG GAG	451				
151	Leu Ala Phe Tyr Lys Hi	s Leu Leu Asp	Ser Asp Ile Phe Lys Gly Glu					
152	80	85						
153			G GAG CAA CTT CAC ACC TCC CTA	499				
154	Pro Ala Leu Leu Pro As	p Ser Pro Met	: Glu Gln Leu His Thr Ser Leu					
155	95	100	105					
156	CTA GGA CTC AGC CAA CT	C CTC CAG CCA	A GAG GAT CAC CCC CGG GAG ACC	547				
157	Leu Gly Leu Ser Gln Le	u Leu Gln Pro	Glu Asp His Pro Arg Glu Thr					
158	110	115	120					
159	CAA CAG ATG CCC AGC CT	G AGT TCT AGT	CAG CAG TGG CAG CGC CCC CTT	595				
160	Gln Gln Met Pro Ser Le	u Ser Ser Ser	Gln Gln Trp Gln Arg Pro Leu					
161	125 13	0	135 140					
162	CTC CGT TCC AAG ATC CT	T CGA AGC CTC	C CAG GCC TTT TTG GCC ATA GCT	643				
163	Leu Arg Ser Lys Ile Le	eu Arg Ser Leu	ı Gln Ala Phe Leu Ala Ile Ala					
164	145		150 155					
165	GCC CGG GTC TTT GCC CA	C GGA GCA GCA	A ACT CTG ACT GAG CCC TTA GTG	691				
166	Ala Arg Val Phe Ala Hi	s Gly Ala Ala	Thr Leu Thr Glu Pro Leu Val					
167	160	165	170					
168	CCA ACA GCT TAAGGATGCC	CAGGTTCCCA 1	GGCTACCAT GATAAGACTA	740				
169	Pro Thr Ala							
170	175							
171			ACCCATTA GGACTTGTGC TGTTCTTGTT	800				
172			ATTATTAAA GAGAAAAGAA ACAAACCCCA	860				
173			AGAAGAAGA ATAAAGTCTC GAGCCCTTGG	920				
174			SAGGGGAAG GGGGCGGTGG CATCGAGAAA	980				
175			SAGCCCAGG CTTTGGCCAT TATCTGTAAG	1040				
176			CTGGGTGGC TCAGGGAAAT GTGCAGATGC	1100				
177			CTGCTCTGT CCCTCAGTTC TAACAGAATC	1160				
178	TAGTCACTAA GAACTAACAG		CGAACTGAC AAA	1203				
180 (2)								
181	(i) SEQUENCE CHARACTER							
182	(A) LENGTH: 196 a							
183	(B) TYPE: amino a							
184	(D) TOPOLOGY: lin							
185	(ii) MOLECULE TYPE: protein							
186	(xi) SEQUENCE DESCRIPTI							
187			Leu Trp Leu Leu Pro Trp Val					
188	-21 -20	-15	-10					
189	-	_	Ser Ser Pro Asp Trp Ala Gln					
190	-5	1	5 10					
191	_		Met Leu Ala Trp Asn Ala His					
192	15	20	25					

RAW SEQUENCE LISTING DATE: 05/15/2003
PATENT APPLICATION: US/09/935,366A TIME: 08:46:29

Input Set : A:\US09935366A.raw

Output Set: N:\CRF4\05152003\I935366A.raw

```
193
         Ala Pro Ala Gly His Met Asn Leu Leu Arg Glu Glu Asp Glu Glu
194
195
         Thr Lys Asn Asn Val Pro Arg Ile Gln Cys Glu Asp Gly Cys Asp Pro
196
                                  50
197
         Gln Gly Leu Lys Asp Asn Ser Gln Phe Cys Leu Gln Arg Ile Arg Gln
198
                              65
                                                 . 70
199
         Gly Leu Ala Phe Tyr Lys His Leu Leu Asp Ser Asp Ile Phe Lys Gly
200
                          80
                                               85
201
         Glu Pro Ala Leu Leu Pro Asp Ser Pro Met Glu Gln Leu His Thr Ser
202
                                          100
203
         Leu Leu Gly Leu Ser Gln Leu Leu Gln Pro Glu Asp His Pro Arg Glu
204
                                     115
205
         Thr Gln Gln Met Pro Ser Leu Ser Ser Gln Gln Trp Gln Arg Pro
206
                                 130
207
         Leu Leu Arg Ser Lys Ile Leu Arg Ser Leu Gln Ala Phe Leu Ala Ile
208
                                                  150
                             145
209
         Ala Ala Arg Val Phe Ala His Gly Ala Ala Thr Leu Thr Glu Pro Leu
210
                         160
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211
         Val Pro Thr Ala
212
                     175
214 (2) INFORMATION FOR SEQ ID NO: 5:
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              (A) LENGTH: 102 amino acids
216
              (B) TYPE: amino acid
217
218
              (C) STRANDEDNESS: Not Relevant
219
              (D) TOPOLOGY: linear
        (ii) MOLECULE TYPE: peptide
220
221
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
222
              Ser Cys Leu Gln Arg Ile His Gln Gly Leu Val Phe Tyr Glu Lys Leu
223
                                                   10
              Leu Gly Ser Asp Ile Phe Thr Gly Glu Pro Ser Leu His Pro Asp Gly
224
225
                          20
                                               25
226
              Ser Val Gly Gln Leu His Ala Ser Leu Leu Gly Leu Arg Gln Leu Leu
227
                                           40
228
              Gln Pro Glu Gly His His Trp Glu Thr Glu Gln Thr Pro Ser Pro Ser
229
                                      55
230
              Pro Ser Gln Pro Trp Gln Arg Leu Leu Arg Leu Lys Ile Leu Arg
                                  70
232
              Ser Leu Gln Ala Phe Val Ala Val Ala Ala Arg Val Phe Ala His Gly
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234
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235
                          100
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              (C) STRANDEDNESS: Not Relevant
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              (D) TOPOLOGY: linear
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        (ii) MOLECULE TYPE: peptide
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VERIFICATION SUMMARY

DATE: 05/15/2003

PATENT APPLICATION: US/09/935,366A

TIME: 08:46:30

Input Set : A:\US09935366A.raw

Output Set: N:\CRF4\05152003\I935366A.raw

L:18 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:] L:19 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]